



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

PRELIMINARY ISSUE

650.7710

Job Sheet 210646



Part No: 650.7710

Job Qty: 5 pcs

Part Name: Electric Cap



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 6/16/20

Job Tracking No:

Created By: Jennifer Renwick

Due Date: 7/13/20

Type: SOLD

Description:

Note: DWG 650.7700 REV.PF1 IPP REV:A 20.06.10 NEW ISSUE FK VERIFY DD

Ship Via:

139 Value

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs		
100	NLX 2500SY - 1	5 pcs	7/6/20	7/6/20	1.00	2.50	NLX 2500SY - 1	
110	QC 2	5 pcs	7/6/20	7/6/20	0.00	0.00	QC 2 - 1	20-07-12
							QC 2 - 12	
							QC 2 - 14	
							QC 2 - 17	
							QC 2 - 19	
							QC 2 - 2	
							QC 2 - 20	
							QC 2 - 22	
							QC 2 - 23	
							QC 2 - 25	
							QC 2 - 32	
							QC 2 - 33	
							QC 2 - 35	
							QC 2 - 39	
							QC 2 - 4	20-07-21
							QC 2 - 40	
							QC 2 - 44	
							QC 2 - 45	
							QC 2 - 48	
							QC 2 - 49	
							QC 2 - 50	
							QC 2 - 51	
							QC 2 - 52	
							QC 2 - 57	
							QC 2 - 62	
							QC 2 - 63	
							QC 2 - 8	
							QC 2 - 66	
							QC 2 - 64	
							QC 2 - 65	



Container No: S290132



Part: 650.7710

Job No: 210646

Serial No/Batch: S290132

Revision: Rev.PF1

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 07/25/20

Plex 6/16/20 1:17 PM Dart.Renwick.Jennifer

120 QC 8	5 pcs	7/6/20	0.00 0.00	QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 2 - 76	
				QC 2 - 86	
				QC 2 - 83	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
				QC 8 - 76	
				QC 8 - 61	
				QC 8 - 66	
				QC 8 - 73	
				QC 8 - 82	
130 Outsource - 17 - Passivate	5 pcs	7/13/20		GRO002-VC	5
140 Packaging 2-1 - Receive - B4B	5 pcs	7/13/20	0.00 0.00	Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	

mk20/07/28

mk20-07-29

110 AUG 6 6 2020

				0.00 0.00	Packaging 2 - 22 - B4B	
					Packaging 2 - 23 - B4B	
					Packaging 2 - 24 - B4B	
					Packaging 2 - 25 - B4B	
					Packaging 2 - 26 - B4B	
					Packaging 2 - 37 - B4B	
150 QC 6	5 pcs	7/13/20	0.00 0.00		QC 6 - 9	
					QC 6 - 68	
					QC 6 - 61	
					QC 6 - 40	
					QC 6 - 81	
					QC 6 - 82	
160 Packaging 3-1 - Stock - B4B	5 pcs	7/13/20	0.00 0.00		Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 37 - B4B	
170 QC 21 - SA	5 pcs	7/13/20	0.00 0.00		QC 21 - SA - 21	
					QC 21 - SA - 70	
					QC 21 - SA - 9	

DAS

82

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AUG 17 2020

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AUG 17 2020

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AUG 18 2020

Part Op 100 - 1-Machine as per folio FD303 FOLIO REV: AA DWG REV: PF1 2-Debur

Descriptions: 110 - QC2- Inspect parts off machine FAI/FAIB

120 - QC8- Inspect parts - second check

130 - -Issue P/O; 46807 PASSIVATE IAW QQ-P-35C, TYPE II -Material type; 303 stainless steel -Certificate of Conformity is required

140 - Certificate of Conformity is required

150 - QC6- All purchased or subcontracted products

160 - Identify as per dwg & Stock

170 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M303R2.250	M303R2.250	4.2000 ft (.84 ea)	100-NLX 2500SY - 1	2985150

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-NLX 2500SY - 1	M303R2.250	4	0	0

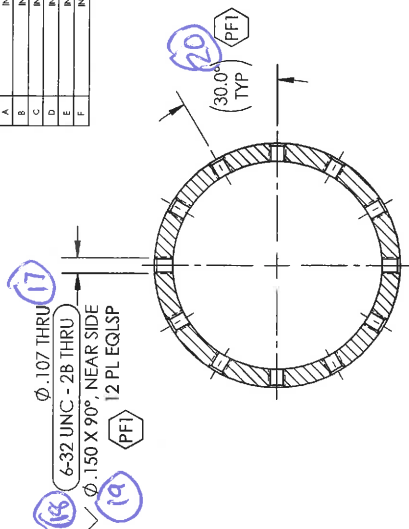
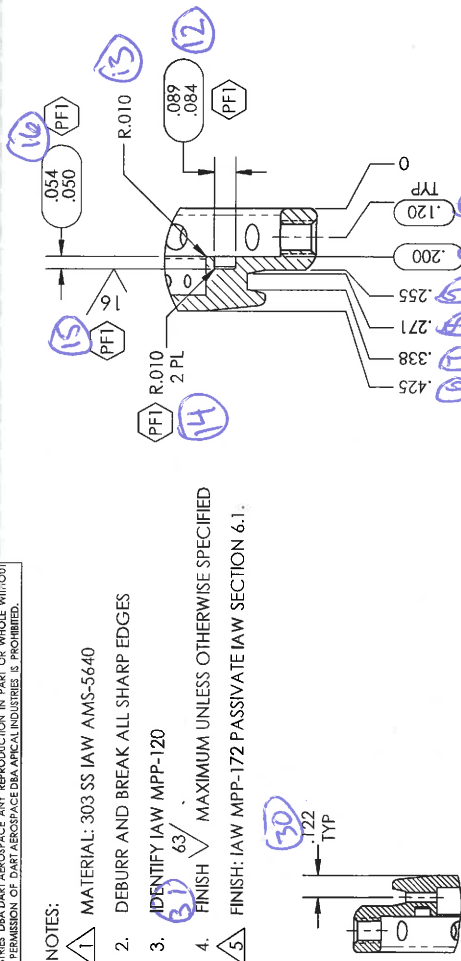
Part Specifications

Specifications could not be found.

Plex 6/16/20 1:17 PM Dart.Renwick.Jennifer

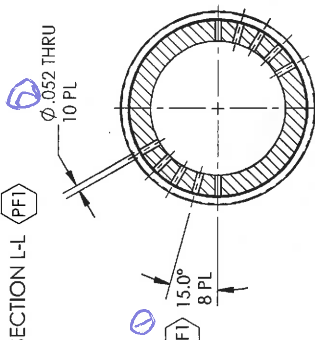
1 MATERIAL: 303 SS IAW AMS-5640

2. DEBURR AND BREAK ALL SHARP EDGES
3. IDENTIFY IAW MPP-120
4. FINISH ∇ MAXIMUM UNLESS OTHERWISE SPECIFIED
5. FINISH: IAW MPP-172 PASSIVATE IAW SECTION 6.1.

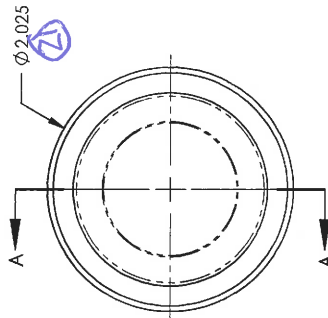


650.7710

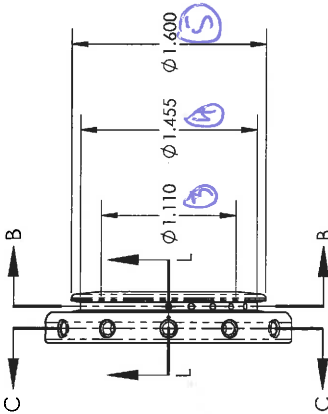
SECTION L-L



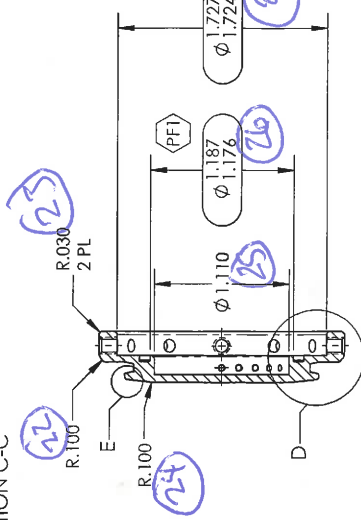
SECTION C-C



SECTION B-B



SECTION A-A



ZONE	REV	DESCRIPTION	DATE	APPROVED
A1-1		REMOVED ELECTROPOLISH FINISH		
A3-1		ADDED R.O.D 2 PL AND SURFACE ROUGHNESS VALUE		
A5-1		ADDED R.O.D 1.530 PL AND DIMENSIONS		
A7-1		MODIFIED COATED PLEAS DIMENSION WAS 30.0° P 12 PL IS (30.0° TYP)		
B1-1		ADDED SECTION 1-1 PL IS 8 PL		
B8-1		DIMENSION WAS 0.174-1.81 IS 0.174-1.187		
A7-2		DIMENSION WAS 6.20 IS 4.5-6.20		
A2-5		ADDED SURFACE ROUGHNESS		
B2-3		DIMENSION WAS 1.44 AND 1.75 DIMENSIONS		
B4-3		ADDED 2 PL TO .454 AND 1.75 DIMENSIONS		
B5-3		DIMENSION WAS .625 IS .625-.630		
B8-3		ADDED ALL AROUND TO RADII DIMENSIONS		
C1-3		ADDED SURFACE FINISH		
C1-3		ADDED 0.089 THRU		
A4-4		DIMENSION WAS 1.07 THRU ALL		
A4-4		ADDED SURFACE ROUGHNESS .054		
A4-4		ADDED R.O.D 2 PL DIMENSION		
A7-4		ADDED SURFACE ROUGHNESS VALUE		
A7-4		DIMENSION WAS .055 IS .055-.059		
A7-4		DIMENSION WAS 0.100 IS 0.099		
C4-4		ADDED MIN THREAD RELIEF CALLOUT		
C5-4		ADDED MISSING HOLE DIMENSION		
C5-4		ADDED MISSING HOLE DIMENSION		
C6-4		DIMENSION WAS 0.174-1.81 IS 0.174-1.187		
C6-4		ADDED ALL AROUND TO RADII DIMENSION		
C6-4		ADDED SURFACE FINISH CALLOUT		
	PFI		05-29-2020	T. CROSS T.E.

[illegible]

SHOP COPY

DETAIL E

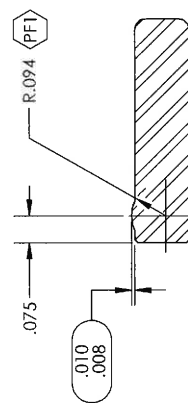
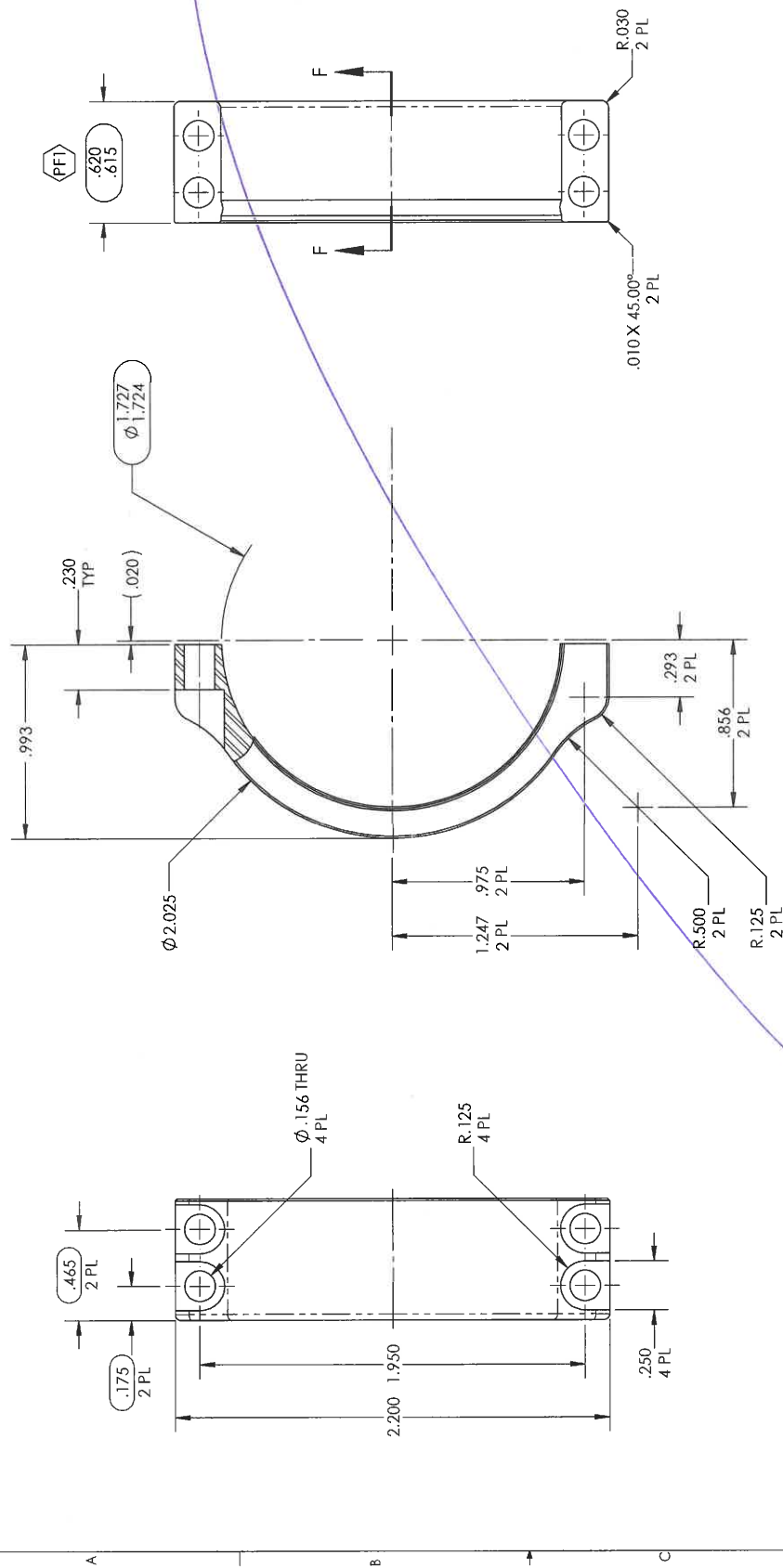
ENGINEERING

UNCONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 210646



SECTION F-F

[illegible]

DART AEROSPACE LTD		Work Order: 210646
Description: CAP		Part Number: 650.7710
Inspection Dwg: 650.7700	Rev: PFI	Page 1 of 1

INSPECTION SHEET

	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1	15°	±.5°	15°			Protractor	
2	Ø.052	±.005	.052			gauge pin	
3	Ø1.110	±.005	1.115			Opt comp	
4	Ø1.455	±.005	1.458			↓	
5	Ø1.600	±.005	1.603			Mic LPO2	
6	.425	±.005	.427			H-gage	
7	.338	±.005	.336			Opt comp	
8	.271	±.005	.269			↓	
9	.255	±.005	.254			H-gage	
10	.200	±.005	.200			↓	
11	.120	±.005	.1225			↓	
12	.084/.089		.087			gauge pin	
13	R.010	±.005	.010			Visual inspection	
14	R.010	±.005	.010	✓		↓	
15	✓					cant measure not enough travel	
16	.050/.054		.051			H-gage	
17	Ø.107	±.005	.106			gauge pin	
18	6-32 UNC	2B	GO			exi - 0050 gage	
19	Ø.150 x .90°	±.005 x .5°	Ø.155 x .90°			Vern LPI10	
20	30.0°	±.5°	30.1°			Protractor	
21	2.025	±.005	2.025			Vern LPI10	
22	R.100	±.005	Rd .1			Visual insp	
23	R.030	±.005	.032			Rad gage	
24	R.100	±.005	.098			Rad gage	
25	Ø1.110	±.005	1.111			Vern LPI10	
26	Ø1.176/1.187		1.184			↓	
27	Ø1.724/1.727		1.725			↓	
28	R.030	±.005	.032			Rad gage	
29	R.010	±.005	.01	✓		Visual inspection	

Measured by: J	Checked by: [Signature]	QC Inspector:
Date: 20/07/25	Date: 20/07/28	Date:

Engineering Approval: (If necessary)	Date:
--	--------------

Rev	Date	Change	Revised by	Approved
A	14.07.31	New Issue	KJ	[Signature]



Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

DISPOSITION		DEPARTMENT/PROCESS			
Job: _____	Rework ☐	Skid-tube ☐	Cross tube ☐	Eng. (Non-AW) ☐	Engineering ☐
Part No. _____	Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Water Jet ☐
	Use-as-is ☐	Large Fab ☐	Finishing ☐	Rec/Store/Packaging ☐	Supplier ☐
Date: _____	Sequence #: _____	QTY Affected: _____		MRB (QS1042) ☐	
Description Work Order Deviation		Disposition			
Completed By		Lead hand / Supervisor			
QC / QA Coordinator					
Root Cause		FAULT CATEGORY			
Operator ☐	Pressure/Forced ☐	Contamination ☐	Power Loss/Surge ☐	Positioned Wrong ☐	
Manufacturing Process ☐	Bending ☐	Misaligned/off center ☐	Folio/Program ☐	Outside Tolerance ☐	
Equip/Tooling ☐	Crushing ☐	BOM/Route ☐	Grain Direction ☐	Drawing ☐	
Handling/Preservation ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Finish ☐	
Material ☐	Crimp/Kink/Ripple/Wave/Twist ☐	Incomplete/Unclear Instructions ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	
Product Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Out of Sequence ☐	Misread ☐	
Process Improvement ☐	Mislabeled ☐	Fit/Function ☐	Off-set/Set-up ☐		
Human Factors ☐	Other/Details: _____				

Mitutoyo **SurfTest S-400**

DATE 2000-02-17
TIME 22:14:45

STAND JIS2001
PROFILE R
FILTER GAUSS
EVA-L 0.5in
N 5
 λ_c 0.1in
 λ_s 320 μ in
TILT-COMP. ALL
CURVE-CMP. OFF
M-SPEED 0.004in/s
R-SPEED 0.04in/s
AUTO-RTN ON
RANGE 32000 μ in
±ESC
DRIVE ON
STYLUS STAND
PRE/POST ON

R-PROFILE

EVA-L 0.5in
 λ_c 0.1inX5

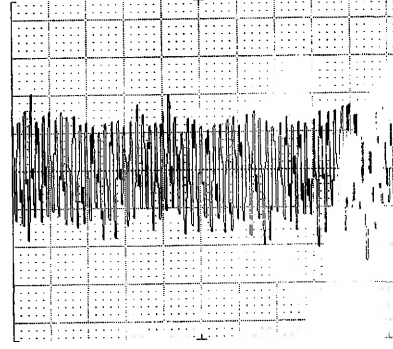
Ra 30.3 μ in
Rz 172 μ in
Rq 35.6 μ in

R-PROFILE

EVA-L 0.5in
 λ_c 0.1inX5

→x5K
x10

Ver. 200.000 μ in/in
Hor. 0.100in/in





Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB046807



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB046807

PO Date: 7/29/20

Due Date: 8/6/20

Purchase Order

Revision:

Revision Date:

Issued By: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	211702	654.6513	654.6500 REV.PR2	Diffuser Cap -10 -Issue P/O; PASSIVATE IAW QQ-P- 35C, TYPE II -Material type; 303 stainless steel -Certificate of Conformity is required	Firmed X2	-	8/6/20	2 pcs	0 pcs	2 pcs	\$8.3333/pcs	\$16.67
2	211491	650.6515	650.6500 REV.PB2	Extended Gauge Adapter -Issue P/O; PASSIVATE IAW QQ-P- 35C, TYPE II -Material type; 303 stainless steel -Certificate of Conformity is required	Firmed X2	-	8/6/20	2 pcs	0 pcs	2 pcs	\$8.3333/pcs	\$16.67



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Canada

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PURCHASE ORDER

POHB046807



Items												
Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	211490	650.6513	650.6500 REV.PB2	Thermal Adapter -Issue P/O; PASSIVATE IAW QQ-P-35C, TYPE II -Material type; 303 stainless steel -Certificate of Conformity is required	Firmed X3	-	8/6/20	3 pcs	0 pcs	3 pcs	\$8.3333/pcs	\$25.00
4	211507	650.7910	650.7900 REV-PA1	Shroud -Issue P/O; PASSIVATE IAW QQ-P-35C, TYPE II -Material type; 303 stainless steel -Certificate of Conformity is required	Firmed X3	-	8/6/20	3 pcs	0 pcs	3 pcs	\$8.3333/pcs	\$25.00
5	210646	650.7710	650.7700 Rev.PF1	Electric Cap -Issue P/O; PASSIVATE IAW QQ-P-35C, TYPE II -Material type; 303 stainless steel -Certificate of Conformity is required	Firmed X2	-	8/6/20	2 pcs	0 pcs	2 pcs	\$8.3333/pcs	\$16.67
Grand Total:												\$100.00

Kimberley



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB046807



Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 7/30/20 1:09 PM Dart.Guerin.Kimberley



Certificat de Conformité / Certificate of Compliance



0 2 9 9 2 8 - 1

Bon de Livraison / Packing Slip

029928 - 1

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
Tel: 514-335-3666 Fax: 514-335-3868
www.grouppaltech.com

Livré à / Ship to

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON, K6A1K7
CANADA
Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON, K6A1K7
CANADA
BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
31-Jul-2020		Ian Wilson		POHB046807				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	654.6513 Rev.	654.6513 01 -PASSIVATION-NITRIC #4 [PASSIVATION NITRIC #4] QQ-P-35C, TYPE II	PASSIVATION CH	2	2	0	0	0
2	650.6515 Rev.	650.6515 01 -PASSIVATION-NITRIC #4 [PASSIVATION NITRIC #4] QQ-P-35C, TYPE II	PASSIVATION CH	2	2	0	0	0
3	650.6513 Rev.	650.6513 01 -PASSIVATION-NITRIC #4 [PASSIVATION NITRIC #4] QQ-P-35C, TYPE II	PASSIVATION CH	3	3	0	0	0
4	650.7910 Rev.	650.7910 01 -PASSIVATION-NITRIC #4 [PASSIVATION NITRIC #4] QQ-P-35C, TYPE II	PASSIVATION CH	3	3	0	0	0
5	650.7710 Rev.	650.7710 01 -PASSIVATION-NITRIC #4 [PASSIVATION NITRIC #4] QQ-P-35C, TYPE II	PASSIVATION CH	2	2	0	0	0

DAS
82
9-89

RECEIVED
AUG 05 2020
DART AEROSPACE LTD.

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
Our financial and legal responsibility will not be higher than the amount of invoice.

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303R 2.250

PO / BATCH NO.: POHVB046639

DATE: JUN 26 2020

5285150

MATERIAL CERT REC'D: YES

THICKNESS ORDERED: φ 2.250

QUANTITY RECEIVED: 12 FT

THICKNESS RECEIVED: φ 2.256

QUANTITY INSPECTED: 12 FT

SHEET SIZE ORDERED: —

QUANTITY REJECTED: —

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	Y	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	Y	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	ASTM A582 / AMS 5640
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT REF # TO LINK CERT	Y	N	H/T H07K
CORRECT MATERIAL IDENTIFICATION	Y	N	
CORRECT M# ON THE MATERIAL	Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	

DAS

9-89

AUG 17 2020

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: _____	DAS	SIGNED OFF BY: _____	
DATE: <u>JUN 26 2020</u>	<u>82</u>	DATE: _____	
	9-89		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

METALLURGICAL TEST REPORT

6870 Highway 42 East
Cheney, KY 41045-9615
(502) 347-6000

Certificate: 599462 1 Mail To: THYSSENKRUPP MATERIALS CA LTD
4700 CHEMIN DU BOIS FRANCOIS
Customer: 007205 001 SAINT LAURENT, QC H4S 1A7

Ship To: THYSSENKRUPP MATERIALS CA LTD
4700 CHEMIN DU BOIS FRANCOIS
SAINT LAURENT, QC H4S 1A7

Date: 5/08/2020 Page: 1
Steel: 303
Finish: ST
Corrosion:
Red Ratio: 14.4 : 1

Your Order: 5400494064

NAS Order: PM 0115189 02

Heat Treat Code: 58,791

Red Ratio: 14.4 : 1

PRODUCT DESCRIPTION:

Round bar, annealed, smooth turned, cold finished
UNS 30300, ASTM A582/17 EN 10204 3.1, ASTM A484/20
AMS 5630V TYPE 1, QOS-7643 CONDITION A
SOLUTION ANNEAL, TEMP 1900F MIN

REMARKS:

COMPLIES W/REQUIREMENTS OF DEAR 252.225-7009 EU DIRECTIVE
2011/65/EU, ROHS, ENF+ROD+CC, NO WELD REPAIR, BENT AND BPG
IN USA FREE FROM MERCURY AND LOW RELATING ALLOY CONTAMINATION

DAS
82
9-89

Product Id	Std & Diameter	Size	Weight	Length	Mark	Pieces	Commodity Code
BL1375 4	2.2500	1.146	144.00	18	1		

CHEMICAL ANALYSIS CM(Country of Melt) ES(Span) US(United States) ZA(South Africa) JP(Japan)

NAS Heat	CM	C %	CO %	CR %	CU %	HN %	ND %	N %	NI %	P %
H07K	08	.042	.18	17.03	.37	1.81	.309	.032	8.45	.032
	S %	SI %								
	.3330	.55								

MECHANICAL PROPERTIES

Product Id	1 d 0.1 c r	HB NO.	.2YS KSI	UTS KSI	RA %	ELONG % 4D
BL1375 4	RT	174.0	45.00	88.00	66.00	48.00

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

KRIS LARK

5/08/2020

From: TK Materials CA, Ltd.

Cust. DART AEROSPACE LTD

CstAr

Wgt.: 162 LB

Del.: 2407584937

CstOr PO.HB046639

Date 06/25/2020

Thomas Sanchez



North American Stainless Canada Inc.
760 Imperial Road North
Guelph, ON N1K1Z3
Canada

METALLURGICAL TEST REPORT

6870 Highway 42 East
Cherry, KY 41045-9615
(502) 347-6000

Certificate: 599462 2 Ball To:
THYSSENKORP MATERIALS CA LTD
4700 CHEMIN DU BOIS FRANC
Customer: 007205 001 SAINT LAURENT, QC H4S 1A7

Ship To:
THYSSENKORP MATERIALS CA LTD
4700 CHEMIN DU BOIS FRANC
SAINT LAURENT, QC H4S 1A7

Date: 5/08/2020 Page: 1
Steel: 303
Finish: SP

Your Order: 5400494064

NAS Order: PN 0115189 02

Heat Treat Code: 58,791

Corrosion:
Red Ratio: 14.4 : 1

PRODUCT DESCRIPTION:

Round Bar, Annealed, Smooth Turned, Cold Finished
UNS 30300, ASTM A582/17 EN 10206 3.1, ASTM A484/20
AMS 5640V TYPE 1, 00S-764B CONDITION A
SOLUTION ANNEAL, TEMP 1900F MIN

REMARKS:

COMPLIES W/REQUIREMENTS OF DEPAR 252.225-7009 SV DIRECTIVE
2011/65/EP-ROHS. ENF+ROHS-CC. NO WELD REPAIR. HEATED AND WRO
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Std & Diameter	Size	Weight	Length	Mark	Pieces	Commodity Code
BL1375 5		2.2500	1,141	144.00	19	1	

CHEMICAL ANALYSIS

CM(Country of Mnt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

ANAB, ISO/IEC 17025, Certificate# L2323
Chemical Analysis per ASTM A751/14a

NAS Heat	CM	C %	CO %	CR %	CU %	IN %	HO %	N %	NI %	E %
H07K	US	.042	.18	17.02	.37	1.01	.309	.033	8.45	.032
		S %	SI %							
		.3330	.55							

MECHANICAL PROPERTIES

Product Id	1 d o i c x	HB No.	.2VS KSI	UTS KSI	RA %	Elong % 4D
BL1375 5	R L	174.0	45.00	88.00	65.00	48.00

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.
KRIS LARK
5/08/2020

From: TK Materials CA, Ltd.
Cust. DART AEROSPACE LTD
CstAr
Wgt.: 162 LB

Del.: 2407584937
CstOr PO.HB046639
Date 06/25/2020

Tomas Sanchez



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **POHB046639**



Supplier: THY001-VC
Thyssenkrupp Materials CA Ltd
O/A VPK Metal- c/o T27540
PO Box 4275, Postal "A"
Toronto
ON
M5W 5V8 Canada
Phone: 905 669 9444
Fax: 905 738 9033

PO No: POHB046639
PO Date: 6/23/20
Due Date: 6/29/20
Purchase Order Revision:
Revision Date:
Issued By: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 30
Freight Terms:
Special Comments:

E-MAILED
2020-06-23

Items													
Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		M303R2.250			M303R2.250 MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft	Firmed	-	6/29/20	12 ft	0 ft	12 ft	\$35.5116/ft	\$426.14
Grand Total:													\$426.14

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable). No Raw Metals from China or Soviet Bloc Countries. (DFARS)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program.

A049 supplier awareness.

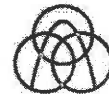
Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit
www.dartaerospace.com for further explanation.

Handwritten signature: Guerin

JUN 26 2020

Plex 6/23/20 1:44 PM Dart Guerin.Kimberley

thyssenkrupp Materials NA



thyssenkrupp

thyssenkrupp Materials NA, 4700 chemin du Bois-Franc, Saint-Laurent, QC H4S 1A7

DELIVERY NOTE

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON K6A 1K7



DATE: 06/26/2020
DOC. NO: 2407584937*
BOL. NO: 2407584937
ORDER NO: 1404554387
YOUR P/O: PO-HB046639
LOADING NO: 3611332117
CUSTOMER NO: 10058125
Route: 303-A
CONTACT: Lucy Truglio
TEL:
FAX:
EMAIL: lucy.truglio@thyssenkrupp.co

**MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
TO SHIPPING.**

ATTN: CHANTAL/LINDA

**** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **
** REFERENCED ON IT ****

Deliveries are carried out for your account and risk acc. to our Gen. Terms & Cond. of Delivery and Payment.

ITEM	DESCRIPTION	NET QTY1 / QTY2	PACKAG
0010	NAS/ DFARS ASTM A582 145" LONG R/L SSRD00924 T-303 Stainless Steel Round 2.2500 " (+-.003) X 145 Mill Length Actual Chemistry/Act. Physical Standard Packaging CERTS MUST INCLUDE TENSILE, YIELD, ELONGATION, AND REDUCTION OF AREA	1 PC 162 lb	1011077777

TAGNUM	QTY	UOMVEND	VENDPO	HLOT	PCS	COM
2001756514	1	PC	NORTH AME 5400494064	H07K BL1375 4	1	
SAE AMS 5640 V;ROHS COMPLIANT;ASTM A 484/A 484M 2018;ASTM A 582/A 582M 2012						

Total Gross Weight 174.000 lb

All items, not declared as partial delivery, are final quantities.
Delivery Terms: PPD gem. Incoterms 2000 Prepaid PREPAID

RECEIVED

JUN 26 2020

DART AEROSPACE LTD.

DELIVERY NOTE

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON K6A 1K7

DATE:	06/26/2020
DOC. NO:	2407584937*
BOL. NO:	2407584937
ORDER NO:	1404554387
YOUR P/O:	PO.HB046639
LOADING NO:	3611332117
CUSTOMER NO:	10058125
Route:	303-A
CONTACT:	Lucy Truglio
TEL:	
FAX:	
EMAIL:	lucy.truglio@thyssenkrupp.co

CERTIFICAT DE CONFORMITÉ/CERTIFICATE OF COMPLIANCE

*thyssenkrupp Matériaux NA certifie que le matériel décrit ci-dessus est conforme aux dessins ou spécifications exigés sur le bon de commande et qui sont en vigueur à la date où la commande a été acceptée./ thyssenkrupp Materials NA certifies that the material described above is in accordance with the drawings or specifications called for on said order that are current on the date order was accepted.

*Nous certifions que le document reproduit ici est une copie conforme du rapport fourni par le fournisseur du matériel où les données résultent de l'analyse faite par un laboratoire qualifié/ We certify that the document reproduced here is true to the report provided by the equipment supplier where the data are the result of analysis by a qualified laboratory.

David Noordine - Director of Quality Assurance



M303 R 2.250

S285150

H071C

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL (AISI 303 SS ROUND BAR
NOTE: AISI 304/316 NOT ACCEPTABLE)
SPECIFICATION: ASTM A582
PART NUMBER: M303RD DDD
WHERE "D DDD" = DIAMETER IN INCHES
EG. 0.75" ROUND BAR = M303RD 750

DAS
82
9-89

RELEASED
2000-02-02
AND

REV.	DESCRIPTION	DATE
A	NEW ISSUE	01.12.20
B	REFORMAT AND ADD STRESS (24 D4-1), REF PART 06.0201	10.01.05
DESIGN		
DRAWN	DATE	REV. B
CHECKED	DRAWING NO.	SHEET 1 OF 1
MFG. APPR.	M303R	SCALE
APPROVED	TITLE	NTS
DE APPR.	303 ROUND BAR	
DATE	10.01.05	

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